DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014807 Address: 333 Burma Road **Date Inspected:** 07-Jun-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as 8 East drip plate, 7DW+7EW LD hold back welds/split welds and 7EW T stiffeners and I Ribs hold back welds. The weld designations reviewed are as follows:

7EW

- 1. SP433-21, 22
- 2. SP128-25, 26
- 3. SP101-34, 35
- 4. SP155-31, 32
- 5. SP162-29, 30
- 6. SP443-27~30
- 7. SP484-29, 30
- 8. SP722-25, 26

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9 BP147-41 43	
9 BPI4/-41 4.)

- 10. BP039-33, 34
- 11. BP093-31, 32
- 12. DP650-17, 18
- 13. DP642-14, 15
- 14. EP061-09, 10
- 15. EP071-09, 10

8 East (Drip plates)

- 1. OBE8D-004, 005
- 2. OBE8E-003, 003

7DW+7EW (LD hold back welds/ split welds)

- 1. SEG039B-046, 047
- 2. SEG039C-046, 047
- 3. SEG041B-005, 006
- 4. SEG041C-021, 022
- 5. SEG039B-006, 043
- 6. SEG039C-006, 043

7DW

Flux Core Arc Welding (FCAW) welding was performed on weld joint 100 located at SEG039C cross beam side segment. Welder is identified as Mr. Bi Laishu (045280). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2232-Tc-U4b-F.

7DW

Flux Core Arc Welding (FCAW) welding was performed on weld joint 011, 012 located at SEG037C cross beam side segment. Welder is identified as Mr. Yu Huiye (045143). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2232-Tc-U4b-F.

NDT Observation

This QA Inspector observed ZPMC Magnetic Particle Testing (MT) Technician performed MT on various locations in the trial assembly yard. Locations and indications are as followed:

8AW + 8BW

1. Side plate T stiffeners hold back welds on the counter weight side of segment.

This QA Inspector observed ZPMC Ultra Sonic Testing (UT) Technician performed UT on various locations in

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the trial assembly yard. Locations are as followed:

1. Performed on the EP/ DP I ribs located on the counter weight side of segment.

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions in the trial assembly yard. Locations and description of work are as followed:

7 West

1. Grit blasting was performed on the edge plate located on the counter weight side of the segment.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer